DCS3101 Assignement 4

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Abstract

This is my submission for the fourth assignment in DCS3101, Introduction to Cybersecurity, fall 2020.

Q1

Cybersecurity 101

- Uses analogies to explain the history of the Internet
- Explains that the Internet was initially designed for a small number of large computers communicating
- The ease of communication on the Internet comes with a cost, and that is vulnerabilities in security
- Paints a picture of how impractical a truly secure network would be

Cyber Codes

- Explains how codes are used all the time, because we communicate our messages in public
- Explains public key cryptography with analogies
- Explains what is encrypted and what is not, mentions that Email falls somewhere in between
- Explains how that almost every code ever crafted has been broken, and that the encryption mechanisms we use today, may have substantial flaws, waiting to be discovered

The Secret Lives of Hackers

- Defines hacking as creative problem solving
- Many are driven by intellectual curiosity, some do ethical hacking, whilst others have malicious intents
- They may be very competent or may use tools they don't understand
- They may have ideal goals, and feel that their goal justify their means

A Cyber Privacy Parable

- Tell why we have to be careful about what we store online
- Shows that when uploading material to social media, the content may be copied by the government or a crime ring for identity theft
- Shows how social media may sell your data to advertising agencies
- Make sure to keep software up to date, and have good passwords

$\mathbf{Q}2$

The score after playing the game through, can be seen in the figure below:

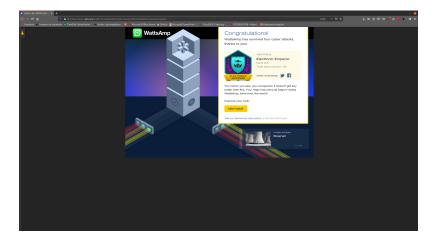


Figure 1: Score from game

I would say that the game is well crafted, and for kids this is a great resource for learning about computer science and cyber security. However, at the university level this is too simple, and I would say that the learning outcomes are extremely limited. Having said that, I must admit that I did have fun playing it.